

EKU Report

Eastern Kentucky University News for the Council on Postsecondary Education

November 2012



Science Building Dedication Also a Celebration

Since EKU's New Science Building opened in January of this year:

- Student achievement is up.
- Absenteeism is down.
- Faculty collaboration and scholarship are up.
- Instructor evaluations have improved.

So when a large crowd gathered in the building's atrium Saturday morning, Oct. 27, it was as much for a celebration as the stated purpose of a dedication.

President Doug Whitlock said those early returns are the result of form meeting function. "And when that happens, like it is in this building, it's quite gratifying."

The \$64 million, 175,000-square-foot facility, adjacent to the University's health sciences complex, houses the Departments of Chemistry and Physics and Astronomy as well as science education classrooms and laboratories. Phase 2, not yet funded but the top construction priority of the University, will add the Departments of Biological Sciences and Geography and Geology.

Other speakers at the hour-long event were Sixth District Congressman Ben Chandler; student Dorinda Rigsby; Dr. Gary Booth, an EKU alum who is the retired vice president of research of Procter & Gamble; and Dr. Malcolm Frisbie, the faculty "shepherd" during the design and construction process. Also present was previous EKU President Joanne Glasser, during whose term funding for the facility was approved by the General Assembly.

The Congressman, who was instrumental in securing approximately \$1.2 million in funding for equipment for the New Science Building, said the country's low rankings in math and science "absolutely have to change. It starts with our public K-12 schools and ends with our universities. We're talking about improving our lives ... and making our country competitive in a global economy. I'm proud of EKU for stepping up to the plate."

Rigsby, a sophomore pre-pharmacy major and a Booth Scholar, said: "This building is a shining example of how much Eastern does care. I'm very proud to be a student of this university."

Booth, who endowed the scholarship fund that bears his name, said he has visited university science facilities worldwide, "and this is really world-class."

Transition Program Reducing Need for Developmental Courses in Math

For the past three years, EKU has assisted more than 50 high schools throughout the region in designing and implementing transitional math courses to help students prepare for college courses.

The impact has been profound: a 36.3-percent drop in enrollment in developmental math courses at Eastern and, because those courses do not count toward graduation requirements, a cost savings of approximately \$3.5 million for students and their families.

University officials anticipate a similar positive impact on retention and graduation rates at Eastern.

At the time that Senate Bill 1 was approved in 2009, the dropout rate for EKU students when enrolled in developmental courses was an astonishing 60 percent.

With that figure in mind, faculty on the EKU math education team began working closely with their high school counterparts to develop transition courses that roughly aligned with EKU developmental courses, allowing for adaptation to the specific needs and conditions in each high school. The EKU faculty provided materials such as worksheets, class notes and measurement instruments for the teachers.

"Long-term and sustainable change is best attained when the change is embedded, bottom up, has input from the local stakeholders and is based on sound research and principles," said Dr. Robert Thomas of the EKU Department of Mathematics and Statistics.

In the Fall 2010 semester, 1,274 EKU students were enrolled in developmental math courses. By Fall 2012, that number had dropped to 811.

EKU Selected to Host NASA Downlink Session

It will be one short bus ride and one giant leap in knowledge for some area middle school students when they visit the ECU campus in January.

ECU, partnering with Kentucky Educational Television (KET), was selected by NASA as one of only six U.S. downlink sites where students will be able to converse with the astronauts aboard the International Space Station. The theme for the Jan. 11 event is "From the Bluegrass to the Blue Marble: Systems in Space."

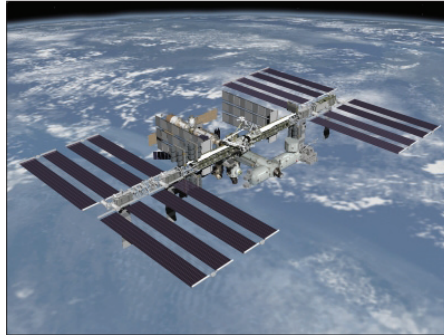
In addition to the 20-minute downlink dialogue with the astronauts, the day-long event will feature a variety of related educational activities. Approximately 200 students who have been identified as gifted and talented in science and/or mathematics will be invited to the Richmond campus, all participating in activities before and after the downlink. The participants will be required to complete an application in which they include a question they would like to ask the astronauts as well as a brief justification. Up to 20 students will be selected to talk with the astronauts; however, the remaining students as well as classrooms throughout the Commonwealth will be able to tune into a live stream of the event via KET.

Last year, ECU established a STEM-H Institute to support and expand partnerships between the university and K-20 schools and communities, advance the public understanding of the needs and opportunities in STEM-H disciplines (science, technology, engineering, mathematics and health), and increase learning opportunities and levels of achievement for K-20 students in the STEM-H disciplines.

"This project allows us to fulfill all three goals," said Dr. Jaleh Rezaie, associate dean of Graduate Education and Research and interim executive director of the Institute. "We are focusing on the middle school students since research has shown that this age group is the most vulnerable. This is the time they decide about their educational interests. Often it is the time they lose interest in math and science. What excites me is the opportunity to inspire and excite the students and teachers about mathematics, science and technology. I'm also excited about the broad impact this project will have."

Each participating school will be assigned a team of ECU mentors (faculty, students and staff) to assist with projects prior to Jan. 11. During the downlink day, faculty will judge the students' team projects and lead discussions.

Becky Kamas, education specialist with NASA, said Eastern and KET "have an excellent plan for involving students in STEM activities before and after the downlink, and will engage many, many students in the state."



Digital Journalism Initiative Will Benefit Rural Newspapers

ECU's Department of Communication, AT&T and the Kentucky Press Association have partnered to improve the sustainability of rural journalism, especially within the University's 22-county primary service region.

The ECU Digital Journalism Initiative (DJI), funded by a \$25,000 contribution from AT&T, is a long-range initiative designed to explore the viability of applying mobile technology to deliver content produced by rural newspapers and to develop a working model for such an application.

The project will involve three phases:

- A survey of current best practices of rural news organizations in applying mobile technologies to create, augment and disseminate news, and develop a working model that improves both audience reach and content richness.
- The development and implementation of a pilot program to test the model created in the first phase. Researchers will work with staff of The Eastern Progress, the University's student-produced campus weekly, to apply the model.
- A workshop for editors within ECU's service region to present guidelines for applying the model.

"This is a new era in communication and news delivery," said David McFaddin, AT&T regional director for external and legislative affairs. "AT&T looks forward to partnering with ECU, which has long been a leader in moving journalism forward."

Meteorite Will Serve Educational, Outreach Purposes

For many years, long before its true nature was known, it served as a doorstep and flower bed ornament. It was even painted green for a time.

Now at ECU, it will be an object of scientific wonder for students of all ages for generations to come.

"It" is a 33-pound meteorite discovered in a cow pasture near Tazewell, Tenn., in the 1930s by Tilmon Brooks, the late grandfather of Donna Lewis, a school secretary in Pineville, Ky. It wasn't until Lewis' husband, George, received a strong signal from his metal detector that the Lewises realized maybe this was no ordinary rock.

When the Lewises brought the meteorite to ECU in July, Dr. Jerry Cook, chair of the Department of Physics and Astronomy, was certain he was looking at an historic showpiece. Tests at the University of Tennessee confirmed the object's origins: it was probably part of a known meteorite strike that had first turned up evidence in Tazewell in 1853. Its actual age might be more than 4 ½ billion years.

"We're extremely lucky to find something like this," Cook said, "and to find one locally is a real plus for us."

Cook said the meteorite, which the University purchased from the Lewises, will be used for educational and outreach purposes, a fact that pleases the former owners most of all.

"We don't want to lock it up somewhere," Cook said. "We want kids to be able to touch it, lift it, and understand what it is."

